

Notice of Allowability

Application No.

09/770,564

Examiner

Medina A Ibrahim

Applicant(s)

DUVICK ET AL.

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment of 11/12/03.
2. ☒ The allowed claim(s) is/are 1-6 and 10 renumbered as 1-7, respectively.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>04-04</u> |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lila Akrad on 04/14/04.

The application has been amended as follows:

In The Specification:

The continuing data on page 1, second paragraph, of the specification has been replaced with the following:

----This application is a continuation of US application 09/352, 168, filed 07/12/1999, now US PAT 6,211,435, which claims benefit to 60/092, 936, filed 07/17/1998, all of which are hereby incorporated by reference. ----

At page 3 of the specification, in line 15, ----now US PAT 6,229,071 and 6,025,188, respectively, --- has been inserted after "1997,".

At page 60, line 23, ---, SEQ ID NO: 34--- has been inserted after the sequence within the bracket.

At page 63, line 12, ---(SEQ ID NO: 35)--- has been inserted after the amino acid sequence.

In The Abstract:

At the abstract on page 74, the last sentence has been deleted.

In The Claims:

Claim 1 (Currently amended). An isolated polynucleotide [comprising a polynucleotide] having at least 95% sequence identity to a polynucleotide selected from the group consisting of SEQ ID NO:5, SEQ ID NO: 10, and SEQ ID NO: 22, wherein the polynucleotide encodes a polypeptide having fumonisin degrading activity.

Claim 2 (Currently amended). A recombinant expression cassette comprising an isolated [a] polynucleotide having at least 95% sequence identity to a polynucleotide selected from the group consisting of SEQ ID NO:5, SEQ ID NO: 10, and SEQ ID NO: 22, wherein the polynucleotide encodes a polypeptide having fumonisin degrading activity.

Claim 3. (Currently amended). A vector comprising a recombinant expression cassette comprising an isolated [a] polynucleotide having at least 95% sequence identity to a polynucleotide selected from the group consisting of SEQ ID NO:5, SEQ ID NO: 10, and SEQ ID NO: 22, wherein the polynucleotide encodes a polypeptide having fumonisin degrading activity.

Claim 4. (Currently amended). A host cell comprising a recombinant expression cassette comprising an isolated [a] polynucleotide having at least 95% sequence identity to a polynucleotide selected from the group consisting of SEQ ID NO:5, SEQ ID NO: 10, and SEQ ID NO: 22, wherein the polynucleotide encodes a polypeptide having fumonisin degrading activity.

Claim 10 (Currently amended). A method of making an APAO enzyme comprising [the steps of] :

- a) transforming a host cell with a recombinant expression cassette comprising a promoter [expressing a polynucleotide] operably linked to [a promoter in a recombinantly engineered cell, wherein the] an isolated polynucleotide [has] having at least 95% sequence identity to a polynucleotide selected from the group consisting of SEQ ID NO:5, SEQ ID NO: 10, and SEQ ID NO: 22, wherein the polynucleotide encodes a polypeptide having fumonisins degrading activity.; and
- b) isolating and purifying the enzyme.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: SEQ ID NO: 5 and 10 are partial nucleotide sequences encoding partial proteins. However, working examples (Examples 8-12) on pages 53-59 show that these nucleotide sequences encode active APAO enzymes.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina A. Ibrahim whose telephone number is (571)

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272-0797. The Examiner can normally be reached Monday -Thursday from 8:00AM to 5:30PM and every other Friday from 9:00AM to 5:00 PM . Before and After final responses should be directed to fax nos. (703) 872-9306 and (703) 872-9307, respectively.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Dr. Amy Nelson, can be reached at (571) 272-0804.

4/14/04

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A handwritten signature in black ink, appearing to read "Amy Nelson", with a stylized, cursive script.

AMY J. NELSON, PH.D
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